## LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

.Sc. DEGREE EXAMINATION -ADVANCED ZOOLOGY AND BIOTECHNOLOGY

# SIXTH SEMESTER - APRIL 2018

#### AZ 6603- ENVIRONMENTAL BIOTECHNOLOGY

Date: 17-04-2018	Dept. No.	Max. : 100 Marks

Time: 09:00-12:00

### Part - A

## Answer all the questions:

 $(10\times2=20 \text{ marks})$ 

- 1. What is Lyophilization?
- 2. Define Xenobiotics.
- 3. What is phytoremediation?
- 4. Define Bioaugmentation.
- 5. Give the composition of Biogas.
- 6. What is digester?
- 7. Comment on bioremediation.
- 8. What are the characteristics of waste water?
- 9. Polymerase chain reaction.
- 10. Define Fermentation.

#### Part - B

## Answer any four questions:

 $(4\times10=40 \text{ marks})$ 

- 11. Describe the process of sewage treatment.
- 12. Write a paragraph on the water treatment plant.
- 13. Write notes on biosorption and activated sludge.
- 14. Give an account on aerobic reactors
- 15. Write a detailed account on biodegradation of xenobiotics.
- 16. What is biological detoxification? Explain its significance with examples.

#### Part - C

### Answer any two questions:

 $(2\times20=40 \text{ marks})$ 

- 17. Discuss bioleaching with its advantages and disadvantages.
- 18. Explain the process of denitrification.
- 19. Write an essay on bioreactors.
- 20. Explain in detail biogas production.

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